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NOTICE OF ALLOWANCE AND FEE(S) DUE

34610

7590

01/26/2009

KED & ASSOCIATES, LLP
P.O. Box 221200
Chantilly, VA 20153-1200

EXAMINER

S ANEL, HANA ASMAT

ART UNIT

PAPER NUMBER

2889

DATE MAILED: 01/26/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,782	12/24/2003	Hun Gun Park	YHK-0123	9459

TITLE OF INVENTION: PLASMA DISPLAY PANEL HAVING DIFFERENTLY SHAPED TRANSPARENT ELECTRODES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/27/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
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or Fax **(571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

34610 7590 01/26/2009
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Chantilly, VA 20153-1200

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10743,782 12/24/2003

Hun Gun Park

YHK-0123

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TITLE OF INVENTION: PLASMA DISPLAY PANEL HAVING DIFFERENTLY SHAPED TRANSPARENT ELECTRODES

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nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/27/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
SANEI, HANA ASMAT	2889	313-582000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.**

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Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.

10/743,782

Examiner

HANA A. SANEI

Applicant(s)

PARK ET AL.

Art Unit

2889

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an amendment filed on 1/7/09.
2. ☒ The allowed claim(s) is/are 49,51-55,57 and 59.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 11/20/08
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Response to Amendment

The Amendment, filed on 1/7/09, has been entered and acknowledged by the Examiner.

Cancellation of claim(s) 1-48, 50, 56, 58, 60-100 has been entered.

Claim(s) 49, 51-55, 57, 59 are pending in the instant application.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Response to Arguments

Applicant's argument(s) filed on 1/7/09 have been fully considered but are moot since Applicant's amendment(s) have overcome the prior art of record.

Allowable Subject Matter

A. Claims 49, 51 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches a plasma display panel, comprising: a transparent electrode pair spaced with a predetermined gap therebetween within a discharge cell, at least one transparent electrode of said transparent electrode pair including: an expanding part having a width which enlarges towards a center of the discharge cell, and a head part connected to the expanding part and having at least a substantially constant width; a barrier rib for dividing the discharge cell with an adjacent discharge cell; a metal electrode formed in a first direction, and electrically coupled to the expanding part; an address electrode provided in parallel to the barrier rib in a second

direction different from the first direction such that the address electrode crosses the metal electrode; and a link overlapping the barrier rib for connecting to a transparent electrode of the adjacent discharge cell.

However, the prior art of record neither anticipates nor renders obvious to one ordinary skilled in the art the plasma display panel comprising the various elements as claimed above in combination with the specific limitation of link being formed at a predetermined depth extending from an end of the head part toward the expanding part, wherein said predetermined depth is approximately 100 microns to 200 microns as set forth in Claim 49.

Claim 51 is allowable because of their dependency status from claim 49.

B. Claims 52-54 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches a plasma display panel, comprising: a transparent electrode pair spaced with a predetermined gap therebetween within a discharge cell, at least one transparent electrode of said transparent electrode pair including: an expanding part having a width which enlarges towards a center of the discharge cell, and a head part connected to the expanding part and having at least a substantially constant width; a barrier rib for dividing the discharge cell with an adjacent discharge cell; a metal electrode formed in a first direction, and electrically coupled to the expanding part; an address electrode provided in parallel to the barrier rib in a second direction different from the first direction such that the address electrode crosses the

metal electrode; and a link overlapping the barrier rib for connecting to a transparent electrode of the adjacent discharge cell.

However, the prior art of record neither anticipates nor renders obvious to one ordinary skilled in the art the plasma display panel comprising the various elements as claimed above in combination with the specific limitation of link being formed at a predetermined depth extending from an end of the head part toward the expanding part as set forth in Claim 52.

Claims 53-54 are allowable because of their dependency status from claim 52.

C. Claim 55 is allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches a first transparent electrode having a first head part protruding from one side of a discharge cell into a center of the discharge cell, and a first strip part connected to the first head part; and a second transparent electrode which includes an expanding part having a larger width as it goes from the other side thereof within the discharge cell into the center of the discharge cell in such a manner to be spaced by a predetermined gap from the first transparent electrode within the discharge cell, and a second head part connected to the expanding part and having a substantially constant width, and a second strip part connected to the expanding part; a first metal electrode connected to the first strip part and a second metal electrode connected to the second strip part, the first and second metal electrodes being formed in a first direction; a barrier rib for dividing the discharge cell from an adjacent discharge cell; an address electrode provided in a second direction

different from the first direction such that the address electrode crosses the first and second metal electrodes; a first link overlapping the barrier rib for connecting to a transparent electrode of the adjacent discharge cell, the first link being formed at a first predetermined depth extending from an end of the first part toward the first strip part; and a second link overlapping the barrier rib for connecting to another transparent electrode of the adjacent discharge cell, the second link being formed at a second predetermined depth extending from an end of the second head part toward the expanding part

However, the prior art of record neither anticipates nor renders obvious to one ordinary skilled in the art the plasma display panel comprising the various elements as claimed above in combination with the specific limitation of each of the first and the second predetermined depths being approximately 10 microns to 200 microns as set forth in Claim 55.

D. Claim 57 is allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches a plasma display panel, comprising: sustain electrode pair including a transparent electrode pair spaced with a predetermined gap therebetween within a discharge cell, and a first metal electrode connected to one of the transparent electrode pair and a second metal electrode coupled to other one of the transparent electrode pair, the first and second metal electrodes being formed in a first direction, at least one transparent electrode of said transparent electrode pair including: a neck part connected to the metal electrode, an expanding part connected to the neck

part and having a width which enlarges as it goes into a center of the discharge cell, and a head part connected to the expanding part and having a substantially constant width; a barrier rib for dividing the discharge cell from an adjacent discharge cell and formed in a first direction; an address electrode provided in a second direction different from the first direction such that the address electrode crosses the first and second metal electrodes; and a link overlapping the barrier rib for connecting to a transparent electrode of said adjacent discharge cell, wherein the link is formed at a predetermined depth extending from an end of the head part toward the expanding part.

However, the prior art of record neither anticipates nor renders obvious to one ordinary skilled in the art the plasma display panel comprising the various elements as claimed above in combination with the specific limitation of the predetermined depth being approximately 10 microns to 200 microns as set forth in Claim 57.

E. Claim 59 is allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches a plasma display panel, comprising: a pair of transparent electrodes having a predetermined gap therebetween within a discharge cell, wherein at least one of said transparent electrodes includes: a stripe part, a head part protruding from the stripe part into a center of the discharge cell, and adjacent cell; a link overlapping a barrier for connecting to a transparent electrode of an a metal electrode connected to the stripe part and formed in a first direction; and an address electrode provided in a second direction crossing the metal electrode, wherein said link

is formed at a predetermined depth extending from an end of the head part toward an expanding part.

However, the prior art of record neither anticipates nor renders obvious to one ordinary skilled in the art the plasma display panel comprising the various elements as claimed above in combination with the specific limitation of predetermined depth being approximately 10 microns to 200 microns as set forth in Claim 59.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hana A. Sanei whose telephone number is (571) 272-8654. The examiner can normally be reached on Monday- Friday, 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minh-Toan Ton can be reached on (571) 272-2303. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*/Hana A Sanei/
Examiner*

*/Toan Ton/
Supervisory Patent Examiner
Art Unit 2889*